a gas flame at nearly a boiling temperature. For keeping the cover in position while the balsam is hardening, he finds the spring clip troublesome and uncertain, and substitutes shot or bullets, of different sizes according to the pressure required, laid upon the cover glass. The bullets are previously flattened by a blow from a hammer. [The conical rifle-balls which the writer has used for the same purpose are exceedingly convenient.]

PRESERVING TUMORS, ETC., DURING TRANSPORTATION.— Dr. J. G. Richardson recommends the popular mounting medium, a saturated solution of acetate of potash, as a temporary preservative of urinary deposits or other pathological specimens that are to be transmitted by post. Sections of tumors or of other tissues may often be prepared by soaking in this solution for two days. They are then to be removed from the solution, without much squeezing, and placed in a piece of india-rubber tubing, or wrapped up in sheet rubber or oiled silk, with the ends firmly tied, and mailed in an ordinary letter, the deliquescent fluid with which the tissue is saturated preventing alike the decomposition or desiccation of the object.

AMPHIPLEURA PELLUCIDA AS A TEST OBJECT. — Mr. Louis H. Noe, of Elizabethtown, N. J., has resolved this object, both dry and in balsam, with sunlight, through the ammonio-sulphate cell condensed obliquely with a small $2\frac{1}{2}$ inch lens, with all of the following objectives: — R. & J. Beck's $\frac{1}{40}$ dry, $\frac{1}{10}$ wet; Powell & Lealand's $\frac{1}{25}$, $\frac{1}{16}$, $\frac{1}{8}$ dry, $\frac{1}{16}$, $\frac{1}{8}$ wet; Wales' $\frac{1}{15}$ wet; Gundlach's $\frac{1}{24}$ (No. viii) wet; Hartnack's $\frac{1}{16}$ (No. x), $\frac{1}{12}$ (No. ix) wet; Tolles' $\frac{1}{10}$ dry, $\frac{1}{10}$, $\frac{1}{6}$ (130°) wet; and Spencer's $\frac{1}{4}$ wet.

NOTES.

THE Yellowstone Expedition, Gen. D. A. Stanley commanding, arrived at Fort A. Lincoln, D. T., September 22d, having passed a little over three months in active operations in the field, and accomplished a march of nearly one thousand miles through a region previously but very imperfectly known. The expedition left Fort Rice, D. T., June 20th, and arrived at the Yellowstone, a few miles above Glendive's Creek, July 15th. Crossing the Yellowstone at this point, the expedition proceeded up the valley of the Yellowstone as far as Pompey's Pillar, two hundred miles

above Glendive's Creek and about three hundred and fifty miles above the mouth of the Yellowstone. From Pompey's Pillar the expedition marched westward to the Musselshell, striking this river near the 109th meridian. Descending the Musselshell to the Big Bend, the course was thence eastward to the Yellowstone, which was reached at a point about seventy-five miles below Pompey's Pillar. The route thence homeward was essentially the one pursued on the outward journey.

The general object of the Expedition was successfully accomplished, and much general information respecting the country was obtained; considerable collections were also made in nearly all departments of natural history. The scientific corps attached to the expedition consisted of J. A. Allen, of the Cambridge Museum, in charge of recent and fossil zoölogy and botany, Dr. Nettre, mineralogist, E. Konopicky, artist, W. R. Pywell, photographer, and C. W. Bennett, taxidermist. The country visited afforded only the usual limited variety of animal and plant life characteristic of the drier portions of the plains, and the geological features presented an almost equal uniformity. The region traversed is embraced almost wholly within the great so-called "lignite tertiary basin," but contains also here and there little insular areas of upper cretaceous strata. The whole series of beds are hence below those so rich in fossil vertebral remains that occur so abundantly a few hundred miles further south; hence the fossils obtained were almost wholly molluscan, with a few imperfectly preserved remains of plants. The rapidity and great length of the marches the expedition was compelled to make, together with the proximity of hostile Indians, prevented so thorough an exploration of the country as was desirable, yet a large amount of information was gathered in respect to the topography of the region traversed, and its natural productions and resources, which is to be embodied in reports to the Secretary of War.

We have already recorded the gift to Prof. Agassiz of $100,000 from his son-in-law, Mr. Shaw. This sum is to be expended in enlarging the collections of the Museum of Comparative Zoology, as it is to be hoped that the state of Massachusetts will pay for the enlargement of the buildings. With this sum have already been purchased the Watchsmuth collection of western crinoids, including 400 species of the Carboniferous age in a beautiful state

of preservation, 170 being types of figures published in western geological reports; a large collection of trilobites from Trenton Falls, N. Y.; 2,500 skeletons from Prof. Ward of Rochester; Dr. Klumzinger's collection of fishes from the Red Sea; the Moesch collection of Jurassic fossils; a large collection of Pacific coast insects; the types of Loew's American Diptera, an exceedingly valuable collection; and Gulick's collection of Sandwich Island shells. Meanwhile the new rooms in the museum are nearly ready for the exhibition of specimens.

THE forty-third meeting of the British Association for the Advancement of Science was held at Bradford. Dr. Joule had been elected President for this meeting, but owing to ill health he was unable to be present, and Prof. A. W. Williamson presided and delivered an admirable inaugural address. With either this or Prof. Allman's philosophical and profound address before the Biological Section, we wish we could say the address of the President of the American Association compared favorably. Neither in the method of treatment nor in its spirit or style did the American production do credit to the occasion. In another number we shall make liberal extracts from Prof. Allman's address. The Association meets next year at Belfast, Ireland, Dr. Tyndall presiding.

A MEETING of the National Academy of Sciences was held October 28th and 29th, 1873, in New York City. The following papers relating to biology were read: — "Results of explorations of the deeper portions of the Gulf of Maine with the dredge," by A. S. Packard, Jr; "On the distribution and primitive number of spiracles of insects," by A. S. Packard, Jr.; "Cycles of deposition in American sedimentary strata," by J. S. Newberry; "On a new method of analysis of composite sounds, and on experiments elucidating Helmholtz's hypothesis of audition," by A. M. Mayer; "On the relations of the different classes of vertebrates," by Theodore Gill; "Biographical memoir of the late Prof. J. F. Frazer," by J. L. LeConte.

WE are requested, by Dr. Coues and Mr. Ridgway conjointly, to state that neither of these gentlemen "desires to continue a controversy of no scientific consequence, and one which, furthermore, has lost its personal interest since a mutual misunderstanding in

which it arose has been explained to their entire satisfaction." Mr. Ridgway further desires us to state that "he is willing to retract the implication of bad faith on the part of Dr. Coues."

THE meeting of the French Association for the Advancement of Science was held at Lyons from the twenty-first to the twenty-eighth of August, under the presidency of Prof. Quatrefages. The sections were fifteen in number, comprising among others Agriculture and Medicine. There were excursions down the Rhone, and to Geneva, with other entertainments.

THE new building of the Indiana State University at Bloomington, which is to be used principally for a museum, will be completed next month, and the Owen collection of between eighty and ninety thousand specimens, purchased by the trustees of the university three years ago, will be arranged at once. This collection contains, it is said, a nearly perfect skeleton of the Megatherium and many other rare and valuable specimens. The trustees have also just purchased a full series of casts from Prof. H. A. Ward of Rochester, at an expense of about $7,000, which will also be at once arranged in the new museum.

WE learn from "Nature" that Prof. Planchon has been charged by the French government with the duty of visiting America to study the ravages of the new vine disease occasioned by the plant louse, *Phylloxera vitifoliæ*.

M. COSTE, known by his elaborate work on embryology, and more recent experiments in fish raising, lately died in Paris, aged sixty-six.

PROF. CZERMAK, the physiologist, died in Leipzig Sept. 16th.

ALBANY HANCOCK, the distinguished English anatomist, died Oct. 24th.

AMONG Macmillan's recent announcement of new books, are the following: Cave Hunting; Researches on the Evidence of Caves respecting the Early Inhabitants of Europe, by W. Boyd Dawkins; The Physiology of the Circulation in Plants, in the lower Animals and in Man, by J. Bell Pettigrew; The Origin and Metamorphoses of Insects, by Sir John Lubbock, and the Elements of Embryology, by Michael Foster. Mr. R. Hardwicke announces Man and Apes, by St. George Mivart.